



Development of New Rule 326 IAC 11-9 Concerning Other Solid Waste Incineration Units: Very Small Municipal Waste Combustors and Institutional Waste Incinerators

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Overview

Adds 326 IAC 11-9 concerning emission control limits for other solid waste incineration (OSWI) units, which include very small municipal waste combustors and institutional waste incineration units. This rule incorporates federal emission guidelines for this Clean Air Act Section 129 incineration category (40 CFR 60, Subpart FFFF).

Citations Affected

Adds: 326 IAC 11-9.

Affected Persons

Sources operating very small municipal waste incinerators and institutional waste incinerators (such as, but not limited to, units owned/operated by schools, prisons, military establishments, churches, or other similar facilities).

Reason or Reasons for the Rule

IDEM must incorporate the federal maximum achievable control technology (MACT) requirements for Clean Air Act Section 129/111(d) requirements into state rules or establish state requirements that are no less stringent than the emission guidelines.

Economic Impact of the Rule

Because this emission standard is a federal requirement and businesses are required to comply, the state rulemaking will not result in additional costs to the regulated entities beyond the costs imposed by the federal rule. IDEM expects that any incinerator subject to the emission limits in this rule would shut down because of the cost associated with installing controls and stack testing required by the rule.

Benefits of the Rule

Citizens living and working in the vicinity of these businesses will benefit from the reduced emissions of hazardous air pollutants. IDEM will be able to enforce the standards by incorporating them into state law.

Description of the Rulemaking Project

This rule incorporates federal air emission requirements for other solid waste incineration (OSWI) units. OSWI units are very small municipal waste combustion units and institutional waste incineration units. On December 16, 2005, U.S. EPA published a final rule establishing new source performance standards (NSPS) for new sources and emission guidelines for existing sources (70 FR 74870). New units are those that commenced construction after December 9, 2004, or commenced reconstruction/modification on or after June 16, 2006. Existing sources are those that commenced construction before December 9, 2004. Section 129 of the Clean Air Act (CAA) requires U.S. EPA to use maximum achievable control technology (MACT) in developing these standards. Federal law requires states to adopt requirements at least as stringent as the federal emission guidelines for OSWI units. IDEM has initiated this rulemaking to establish emission standards consistent with those of U.S. EPA's final rule for existing units. This rule will provide the legal mechanism to implement the emission guidelines and will be part of the state plan that IDEM will submit to U.S. EPA for approval, as required by Sections 111(d) and 129 of the CAA. The federal emission

guidelines for existing sources are not directly enforceable and must be implemented by the state through a state plan, i.e., state rule or other enforceable mechanism. NSPSs are incorporated by reference in Article 12 and the OSWI NSPS will be incorporated into state rule in a separate rulemaking through the annual update to the references to the Code of Federal Regulation (CFR) definition for June 30, 2006.

The federal rule applies to very small municipal waste combustion units that have the capacity to combust less than thirty-five (35) tons per day of municipal solid waste or refuse-derived fuel and institutional waste incineration units of any size. The definition of municipal solid waste in the rule includes wastes "collected from" multiple establishments. Under this definition incinerators owned/operated by commercial businesses, such as grocery stores, that burn waste generated on site rather than collected from multiple establishments are not considered very small municipal waste combustion units. Institutional waste incinerators include units owned/operated by an organization having a governmental, educational, civic, or religious purpose, such as a school, prison, military establishment, church, or other similar facility. Air curtain destructors/incinerators that burn municipal solid waste or institutional waste are also regulated by this rule. However, as long as the air curtain destructor/incinerator is burning one hundred (100 %) wood waste, clean lumber, and/or yard waste, the unit needs to only comply with an initial and subsequent annual opacity test. The following type of incineration units are excluded from this rule:

- Co-fired combustors (i.e., less than thirty percent (30%) of the total fuel input by weight is municipal solid waste)
- Incinerators and air curtain incinerators in isolated areas of Alaska
- Rural institutional waste units
- Pathological waste units
- Temporary-use incinerators and air curtain incinerators used in disaster

recovery

- Units that combust contraband or prohibited goods
- Incinerators used for national security

Sources regulated by other federal MACT or Section 111(d)/129 regulations are not subject to this rule. The exclusion for co-fired combustors, cogeneration facilities, rural institutional waste incinerators, pathological waste incinerators, small power production facilities, temporary-use units used in disaster recovery, and national security incinerators is conditioned upon the source meeting notification and recordkeeping requirements. The federal rule establishes emission limits for cadmium (Cd), carbon monoxide (CO), dioxins and dibenzofurans (dioxins/furans), hydrogen chloride (HCl), lead (Pb), mercury (Hg), opacity, oxides of nitrogen (NO_x), particulate matter (PM), and sulfur dioxide (SO₂). The rule also establishes requirements for operator training and qualifications, waste management plans, and testing and monitoring requirements. The waste management plan is a written plan that identifies both the feasibility and the methods used to reduce or separate certain components of solid waste from the waste stream in order to reduce or eliminate toxic emissions from incinerated waste. Initial and annual stack tests are required for all pollutants with emission limits and continuous emissions monitoring is required for carbon monoxide. Sources are also required to continuously monitor operating parameters to ensure continuous compliance with the emission limits. Units not operating pursuant to a Title V permit will be required to submit an application for a Title V permit within one (1) year from the effective date of this rule, or December 16, 2008, whichever is earlier.

At this time IDEM estimates that there are very few sources subject to this rule. Many sources that would have been subject to this rule have shut down over time. There may be some incineration units located at schools, hospitals, prisons, military establishments, or facilities covered by the institutional waste

incineration units definition operating in Indiana. There are some sources that will be required to notify IDEM that they are excluded from this rule and some will need to keep records to prove they are exempt.

In lieu of compliance with the rule, sources may choose to shut down and use other waste disposal options, such as sending waste off-site to a commercial incinerator. Incinerators that continue to operate will need to install add-on air pollution control devices to meet the emission limits and comply with extensive monitoring requirements. Although the rule does not require the use of a specific type of control device, the MACT emission limits were determined based on the performance of wet scrubbing systems on OSWI units. Sources subject to this rule are required to comply by either three (3) years after the effective date of the state rule or December 16, 2010, whichever is earlier. If an owner or operator plans to permanently close the OSWI unit, it must be done so by these same dates. The source has one hundred eighty (180) days after the final compliance date in the rule to conduct the initial performance test. Sources are required to meet the emission limits on the date the initial performance test is required or completed, whichever date is earlier. The draft rule language incorporates by reference the federal model rule language from 40 CFR 60, Subpart FFFF excluding the sections that have to do with the state implementing a state plan.

Scheduled Hearings

First Public Hearing: December 6, 2006, Room A, Indiana Government Center South, 402 West Washington Street, Indianapolis, Indiana.
Second Public Hearing: To be determined.

Consideration of Factors Outlined in Indiana Code 13-14-8-4

Indiana Code 13-14-8-4 requires that in adopting rules and establishing standards, the board shall take into account the following:

- 1) All existing physical conditions and the character of the area affected.
- 2) Past, present, and probable future uses of the area, including the character of the uses of surrounding areas.

3) Zoning classifications.

4) The nature of the existing air quality or existing water quality, as appropriate.

5) Technical feasibility, including the quality conditions that could reasonably be achieved through coordinated control of all factors affecting the quality.

6) Economic reasonableness of measuring or reducing any particular type of pollution.

(7) The right of all persons to an environment sufficiently uncontaminated as not to be injurious to:

- (A) human, plant, animal, or aquatic life; or
- (B) the reasonable enjoyment of life and property.

Consistency with Federal Requirements

The amendments are consistent with federal rules.

Rulemaking Process

The first step in the rulemaking process is publication of one of three types of notices in the *Indiana Register*. The first type of notice is a first notice of comment period. The first notice of comment period includes a discussion of issues and opens a first comment period. A second notice is then published which contains the comments and the departments responses from the first comment period, a notice of first meeting/hearing, and the draft rule. The second type of notice is a section 7 notice. A section 7 notice contains a determination by the commissioner under IC 13-14-9-7 that only one comment period is required. It contains the commissioner's determination and findings, the draft rule, a request for written comments and a notice of first meeting/hearing. The third type of notice is a section 8 notice. A section 8 notice contains a determination by the commissioner under IC 13-14-9-8 that no public comment periods are required. It contains the commissioner's determination and findings, the draft rule and a notice of first meeting/hearing. In each case the Air Pollution Control Board holds the first meeting/hearing and public comments are heard. The proposed rule is published in the *Indiana Register* after preliminary adoption along with a notice of second meeting/hearing. If the proposed rule is substantively different from the draft rule, a third comment period is required. The second public meeting/hearing is held and public

comments are heard. Once final adoption occurs, the rule is reviewed for form and legality by the Attorney General, signed by the Governor, and becomes effective 30 days after filing with the Publisher. This rulemaking was initiated with a section 7 notice.

IDEM Contact

Additional information regarding this rulemaking action can be obtained from Susan Bem, Rules Section, Office of Air Quality, (317) 233-5697 or (800) 451-6027 (in Indiana).